

NOTES AND NEWS.

HERBERT BROWN, who was elected an associate member of the American Ornithologists' Union in 1885 and a member in 1901, died at Tucson, Arizona, May 12, 1913. At the time of his death Mr. Brown was 65 years old, having been born in Winchester, Virginia, March 6, 1848. He was twice married and leaves a widow and one son.

In 1873 he located in Tucson where he made his home throughout most of the remaining part of his life. In 1883 the writer lived a few months in Tucson and soon after his arrival became acquainted with Mr. Brown and found in him a most interesting companion and a congenial friend. As soon as he learned that I was an ornithologist he expressed the greatest pleasure saying that for years he had been keenly interested in birds but did not know how to identify them nor how to make skins. He soon learned to prepare excellent specimens and since that time continued his ornithological studies with much enthusiasm whenever possible. Ultimately he came to know Arizona birds very well. He was curator of the museum of the University of Arizona from its foundation, and his collections in various branches of natural history were donated to this institution. He always took an active interest in scientific work and cordially welcomed scientific workers who visited Tucson. As a consequence he made many warm friends among scientific as well as non-scientific men who will feel his death as a personal loss.

For some years after his arrival in Tucson he had many adventurous experiences especially during prospecting trips in the desert mountains of Arizona and northern Sonora. During this time he had several narrow escapes from Apache Indians and from death by thirst on the waterless desert plains of that region.

Soon after we became friends he told me about a kind of "Bob-white" quail he had often seen on the grassy plains south of Tucson, near the Sonora border, and my interest in the subject led him to secure and send to Mr. Ridgway the first specimen ever collected of the bird afterwards described as *Colinus ridgwayi*.

For many years Mr. Brown was connected with newspapers in Tucson as reporter, editor or owner, and was one of the best known and most highly respected members of the community. At the time of his death he was President of the Audubon Society of Arizona, and Clerk of the Superior Court of Pima County.—E. W. N.

THE study of bird songs is a department of ornithology that has failed to receive the attention that it deserves or at least has failed to advance along true scientific lines. This may be due in part to the rather surprising attitude of most leading ornithologists toward the method employed in recording bird song, i. e. the musical notation. One ornithologist says

"Musical notation might as well be Greek so far as it gives an adequate idea of song to any other than the transcriber," and another while admitting the difference in tone quality between notes sung by a bird and notes played on a piano, fails to realize the mechanical nature of the piano scale and cites his inability to recognize songs played on the piano from records made in musical notation by one of the leading students of bird song, as indicating the failure of this method. Of forty-one songs played by the pianist "thirty-three conveyed absolutely no impression, we could not even guess at their identity."

There are of course two objects in view in recording bird song, (1) to provide a description of the song that will enable someone else to reproduce or recognize it, (2) to make an accurate record of the song which may be compared with other records made by the same or other individuals, the series forming the basis for a scientific study of the subject.

The first is the phase of the subject that has received most attention. No matter what method of notation or description may be used it is extremely doubtful whether any bird song can be so recorded that one who has never heard it can reproduce it with any degree of accuracy from the printed record. Even such an easily imitated call as that of the Whip-poor-will has to be heard before it can be reproduced with proper accent, speed, and quality.

When it comes to recording a song so that one will be able to recognize in the description a song that he has actually heard, the case is very different and the calls and songs of many species may be so recorded. The method of notation may vary, it may be syllabic or it may be musical but neither will give any idea of quality which can only be supplied, and incompletely at that, by some descriptive clauses. To the musician however the musical notation is by no means "Greek," and with some description of quality he gets a far better idea of a song accurately represented on a musical staff than the non-musician is able to obtain from a syllabic representation.

Some syllabic representations recall the note very accurately as 'Whip-poor-will,' 'Pee-wee,' 'Bob-white'; the 'Pea-body, pea-body, pea-body' of the White-throated Sparrow etc. etc. Others are less happy, while a majority of efforts, where the song is less striking, are almost ridiculous. One has but to compare the efforts of various writers to see how widely their ideas of proper syllabic representation of song differ. When attempt is made to illustrate individual variations of the song of any species by this method one usually loses entirely the points of resemblance between the variations which are so well shown by the musical notation.

The more important phase of the study of bird song is the formation of a series of records as a basis for scientific comparisons and deductions, such records constituting the 'specimens' for this line of investigation. In this work the use of musical notation is absolutely essential, just as mathematics is essential in computing averages and percentages of error, in bird migration, or chemical notation in recording the composition of pigments or other products of the bird's structure. These are all unintelligible to

one who is ignorant of them but a knowledge of them is necessary to investigation in the fields to which they apply.

The student of bird song should not perhaps be too much of a musician; he should moreover have in addition a full appreciation of the importance of scientific accuracy and of the ultimate objects of the investigation. Records to be of value must be made by actual test of each note with a graded pitch pipe, as is done by our best observers, while the time must be correctly gauged by some metronome contrivance. The memorizing of a song and its later transcription on the musical staff, will not suffice.

Accurate records require a vast amount of painstaking effort but they embody the scientific musical basis of the song — that which is essential for its study. They have already shown us that there is great individual variation in the song of any species, the apparent uniformity being due to the identity of certain leading notes or intervals in the songs of all individuals. The possibilities for future work are innumerable. The whole question of mimicry is involved, upon which we have diametrically opposite opinions and between these only a study based on such records can decide. Are the songs of such birds as the Mockingbird really mimicry or is the resemblance to the songs of certain other species merely accidental? When the individuals of a species in the same immediate neighborhood are found to sing in the same key, does it indicate a desire on the part of the birds for harmony or are these birds of common ancestry and have they inherited the tendency to sing at a certain pitch along with other inherited characters? Have birds really an appreciation of music similar to that possessed by man, or is the complementary nature of the songs of several individuals answering one another accidental and due in part to the imagination of the hearer? These and many other questions are awaiting conclusive answers and in investigating them we must remember that bird song is music and in its scientific study must be measured by musical standards. At the same time the need of rigid accuracy and unbiased judgment must ever be kept in mind to guard against the enthusiasm of the musician which like that of the artist is sometimes inclined to run away with him when dealing with such problems.

THE American Museum's Colombian expedition of 1913, returned to New York City early in May, after an absence of four months. The expedition was under the leadership of Frank M. Chapman, who had as his chief assistant that experienced collector in tropical America, George K. Cherrie, while Louis Agassiz Fuytes served as the artist of the expedition, and Thomas Ring, Paul Griswold Howes, and Geoffrey O'Connell acted as assistants. The objects of the expedition were to secure material for a Habitat Group of the bird-life of the Magdalena Valley; to determine as accurately as possible the limits of the so-called "Bogotá" region from which, during the past seventy-five or more years, doubtless hundreds of thousands of birds have been shipped; and to collect a series of representative birds from this region which should be properly labeled as regards

date, sex, and especially locality and altitude. We understand that the expedition in all these respects made a great success, no less than 505 species of birds being collected in some forty-five days of actual field work; an indication of the richness of the avifauna of this part of the world.

THE many members of the American Ornithologists' Union who have enjoyed a delightful day's outing at the Club-house of the Washington Biologists' Field Club, on Plummers Island in the Potomac, will congratulate the Club upon the completion of twelve years of ownership of its beautiful island home, which is marked by the issue of an attractive little brochure giving a history of the organization and its work.

As an illustration of what intensive study will yield it may be mentioned that on the twelve acres included on Plummers Island there have been identified, 26 mammals; 143 birds; 18 reptiles; 12 amphibia; 40 fishes; 1500 beetles; 500 flies; 420 bugs; 60 orthoptera, 550 seed bearing plants and 286 lower plants. Papers to the number of 120 have been published dealing to some extent with the fauna and flora of the island and 106 new species, 12 new genera and 2 new families have been based on material collected there.

READERS of 'The Auk' will be pleased to learn that Mr. Robert Ridgway has completed the manuscript of Part VI of his 'Birds of North and Middle America' and is now engaged on the synonymy and keys to higher groups for the remainder of the work.

THE appearance of Index Zoologicus No. II published by the Zoological Society of London and comprising a list genera proposed from 1901-1910 as well as some overlooked names of earlier date, will be welcomed by systematic ornithologists. They will however be surprised to find no mention of Dr. C. W. Richmond's List of Genera of Birds 1901-1905 (Proc. U. S. Nat. Mus., Vol. 35, pp. 583-655.—Dec. 16, 1908), the most important paper on bird genera that has appeared in the period under consideration. We might mention also that the genus *Macrosoma* credited to Aves in the Index, proves to be based upon a reptile, but we trust that such slips are rare.

THOSE who are interested in the stability of scientific nomenclature have felt more or less apprehension as to the outcome of the agitation against the strict application of the law of priority. The result of the discussion at the Ninth International Congress of Zoölogy at Monaco, however, was eminently satisfactory and will inspire confidence in the stability of the International Code and the decisions of the International Commission. According to the report published in Nature, "A resolution was adopted which empowered 'the nomenclature commission to suspend the rules in cases where it would cause great confusion to carry them out. This power

is, however, safeguarded by such stringent conditions that there is no fear of its being used except in very urgent cases." This should be satisfactory to everyone, for if we accept the opinions of the Commission, as we should do, in all cases which give rise to different interpretations of the Code, we can just as easily accept their decision in such extraordinary cases as will be covered by the new resolution. Furthermore the generous attitude of the Congress in devoting so much time to the consideration of the subject and its thorough discussion in the general meeting cannot help but disarm the critics, bring both sides together and make for stability in the end.

MESSRS. WITHERBY & Co. have been appointed European Agents for "The Emu," the organ of the Royal Australasian Ornithologists' Union, and copies of that publication can now be obtained at 326, High Holborn, London.

CIRCULARS 92 and 93 of the Biological Survey U. S. Dept. of Agriculture setting forth the proposed regulations for the protection of migratory birds in accordance with the recently enacted Federal Law reach us just as we go to press. They deserve the careful study and support of all sportsmen and ornithologists.